

Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in this Application.

Listing of Claims:

Claim 1. (Currently Amended) Device for measuring the pressure of a liquid medium, ~~in particular a liquid medium~~, said device comprising a measuring chamber through which the medium can flow and which has at least one elastically deformable wall, at least one wall that is more rigid by comparison to said ~~first~~ deformable wall, and an inlet and outlet for the medium, ~~characterized in that~~ wherein at least one excitation electrode is provided in or on the at least one more rigid wall of the measuring chamber, and at least one signal electrode is provided on the elastically deformable wall wherein a measure of impedance between the electrodes as a liquid medium flows through the measuring chamber serves to measure the pressure of the liquid medium, ~~for impedance measurement.~~

Claim 2. (Currently Amended) Device according to Claim 1, ~~characterized in that~~ wherein an excitation system is provided for supplying alternating current to the at least one excitation electrode.

Claim 3. (Currently Amended) Device according to Claim 2, ~~characterized in that~~ wherein the excitation system delivers a relatively high-frequency alternating current of relatively low current intensity, and, ~~in particular~~, the alternating current is adjustable.

Claim 4. (Currently Amended) Device according to Claim 1, ~~characterized in that~~ wherein the at least one excitation electrode is made of a material providing good conduction of relatively high-frequency alternating currents, and, ~~in particular~~, is hard silver-plated.

Claim 5. (Currently Amended) Device ~~(4)~~ according to Claim 1, ~~characterized in that~~ wherein the elastic wall is made of a reversibly deformable elastomeric material, ~~in particular an elastomer~~.

Claim 6. (Currently Amended) Device according to Claim 1, ~~characterized in that~~ wherein the at least one signal electrode is designed substantially flat, being applied ~~in particular~~ as a film material, conductive coating, conductive imprint and/or lacquer, ~~in particular~~ onto the elastic wall of the measuring chamber by a vacuum deposition method or being sprayed on, adhesively bonded on ~~or otherwise applied~~.

Claim 7. (Currently Amended) Device according to Claim 1, ~~characterized in that~~ wherein the at least one elastic wall is or can be connected to the other walls of the measuring chamber by a tongue-and-groove joint, the elastic wall having ~~in particular~~ an annular bead element on its edge facing toward the other walls, and the walls which are or can be connected to the elastic wall having at least one groove for insertion of the bead element.

Claim 8. (Currently Amended) Device according to Claim 1, ~~characterized in that~~

wherein said elastic wall has freedom to move in or out with respect to said chamber ~~an arrangement is provided for ensuring free mobility of the elastic wall.~~

Claim 9. (Currently Amended) Device according to Claim 8, ~~characterized in that~~ wherein the arrangement is a protective cap, or a recess ~~which permits free mobility of the elastic wall and which is situated in a retaining means for securing the device in the area of the measuring chamber.~~ , the cap or recess providing said freedom for said wall to move in or out.

Claim 10. (Currently Amended) Device according to Claim 9, ~~characterized in that~~ wherein the protective cap and/or the recess in the retaining means ~~has such a shape and such dimensions, and is arranged in the area of the elastic wall such that it~~ the elastic wall abuts said cap or recess ~~forms an abutment surface for the latter for pressure limitation.~~

Claim 11. (Currently Amended) Device according to Claim 8-9, ~~characterized in that~~ wherein said device may be adjusted and held ~~an arrangement is provided for adjusting the device and for holding it at an adjustable height, this arrangement in particular being provided on the retaining means.~~

Claim 12. (Currently Amended) Device according to Claim 1-9, ~~characterized in that~~ wherein the measuring chamber has in at least some areas a means for coupling out capacitive fields and/or is surrounded by a means acting as a Faraday cage, and in

~~particular~~ the measuring chamber and/or the retaining means is/are provided with a metallic coating.

Claim 13. (Currently Amended) Device according to Claim 1, ~~characterized in that~~ wherein in order to determine ~~the~~ conductivity of the medium located in the measuring chamber, ~~an~~ said at least one excitation electrode and a second electrode are provided outside the elastic wall.

Claim 14. (Currently Amended) Device according to Claim 1, wherein said device measures conductivity between the electrodes as a liquid medium flows through the measuring chamber which serves to measure a hematocrit value, ~~characterized in that~~ wherein an evaluation unit is provided for determining the hematocrit value from the determined conductivity ~~value~~ and/or the internal pressure of the measuring chamber ~~and in particular for correction of zero line and sensitivity~~.

Claim 15. (Currently Amended) Device according to Claim 1, said device including a retaining means, ~~characterized in that~~ wherein at least one contact ~~pin~~ pin is provided for attaching the measuring chamber onto the retaining means.

Claim 16. (Currently Amended) Device according to Claim 15, ~~characterized in that~~ wherein the retaining means has a retaining plate which is provided with contact surfaces or contact pads ~~and which is used to generate concealed contacting~~ to provide contact between the retaining means and the measuring chamber.

Claim 17. (Currently Amended) Device according to Claim 16, ~~characterized in that~~ wherein the contact surfaces and/or contact pads and the contact pins are distributed in such a way that false contacting and false polarity are substantially avoided.

Claim 18. (Currently Amended) Device according to Claim 15, ~~characterized in that~~ wherein at least some of the contact pins and said excitation and said second electrodes are formed integrally.

Claim 19. (Currently Amended) Device according to Claim 18, ~~characterized in that~~ wherein the contact pins and the excitation and said second electrodes are molded onto the measuring chamber, ~~in particular~~ in an insert injection-molding operation.

Claim 20. (Currently Amended) Device according to Claim 15, ~~characterized in that~~ wherein the protective cap has a base part for protecting the elastic wall of the measuring chamber, and a collar part which at least partially surrounds the area of the excitation and said second electrodes and/or contact pins so as to protect the contact pins.

Claim 21. (Currently Amended) Method for determining ~~the~~ a hematocrit value of blood contained in a measuring chamber, according to claim 13, in particular using a device as claimed in Claim 1, in which method comprising:

providing a measuring chamber through which the blood can flow and
which has at least one elastically deformable wall, at least one wall that is more

rigid by comparison to said deformable wall, and an inlet and outlet for the medium,

providing at least one excitation electrode and a second electrode in or on the at least one more rigid wall of the measuring chamber, and said at least one excitation electrode and a second electrode projecting into said measuring chamber,

allowing the blood flows to flow through the measuring chamber in an extracorporeal circuit, and

determining the hematocrit value ~~is determined by determining the~~
measuring a conductivity value between the at least one excitation electrode and the second electrode ~~two fixed electrodes projecting into the measuring chamber.~~

22. (Currently Amended) Method according to Claim 21, ~~characterized in that~~ wherein,
~~in order to draw up a liquid balance,~~ the hematocrit value is determined by conductivity value calculation at the start of a measurement path and at the end of the measurement path and ~~is~~ the start and end values are compared.